# ELK MANAGEMENT GUIDELINES IN AREAS WITH BRUCELLOSIS WORKING GROUP

### PROPOSED RECOMMENDATIONS

# **NOVEMBER 8, 2012**

### **Issue Statement:**

Brucellosis is a contagious bacterial disease that affects livestock, elk and bison in the GYA. It is a federally and internationally regulated disease. In recent years, brucellosis has been found in livestock herds in southcentral and southwest Montana, and evidence indicates elk are the likely source.

Brucellosis itself, as well as the requirements of brucellosis disease regulations, threaten the viability of the livestock industry in this area and landowner tolerance of elk because of the increased direct and indirect costs associated with repeated testing, possible quarantine, and changes in land use resulting from disease regulation. In addition, while a large portion of Montana's economy derives from major exports of livestock, brucellosis results in limitations on marketing options (stigma associated with cattle produced on the DSA), as well as the ability to transport/export into and out of the DSA and the state of Montana. This is especially true because the prevalence of brucellosis in the elk population seems to be increasing.

Management tools developed by the FWP Commission will be subject to considerable uncertainty due to 1) the multiple agencies, jurisdictions, and various interest groups involved in management of brucellosis, 2) incomplete understanding of the distribution of Brucella in elk populations, and 3) incomplete understanding of how elk movements, behavior, and seroprevalence contribute to possible transmission of brucellosis.

Maintaining the viability of the livestock industry as well as livestock owners' tolerance of elk populations in this area is important; elk populations benefit from a viable livestock industry because significant elk habitat and hunter harvest opportunity occur on private lands. Tools for reducing the prevalence of brucellosis in elk could not only reduce the risk of transmissions to cattle, but could also help restore traditional movements and distributions of elk. Eradication of brucellosis in elk is not currently feasible; management tools need to be endorsed by the FWP Commission that will reduce and if possible eventually eliminate the risk of transmission between elk and livestock, in a manner that considers the interests of livestock owners, landowners, wildlife enthusiasts, recreationalists and hunting groups.

## Objectives (fundamental objectives in bold):

STRATEGIC OBJECTIVE: Maintain state wide brucellosis-free status for Montana.

STRATEGIC OBJECTIVE: Contain, reduce, and eventually eliminate the DSA.

STRATEGIC OBJECTIVE: Minimize impacts of brucellosis in wildlife to livestock producers in the DSA.

STRATEGIC OBJECTIVE: Improve research/monitoring and understanding of Brucella abortus biology and behavior to increase efficacy of management.

STRATEGIC OBJECTIVE: Maximize coordination among all stakeholders, agencies and jurisdictions dealing with brucellosis reduction in and around the Greater Yellowstone area.

#### FUNDAMENTAL OBJECTIVE: Minimize transmission.

MEANS OBJECTIVE: Develop more effective Brucella abortus vaccine and vaccination protocols.

MEANS OBJECTIVE: Contain, reduce, and eventually eliminate Brucellosis.

MEANS OBJECTIVE: Minimize seroprevalence in elk in each wintering elk herd within the DSA (measure seroprevalence).

MEANS OBJECTIVE: Reduce harboring (instances of relatively little or reduced human disturbance that may result in concentrations of elk).

FUNDAMENTAL OBJECTIVE: Maximize acceptability of elk management tools and populations in the DSA for:

Sportspersons (measure with satisfaction survey),

Wildlife enthusiasts (measure with satisfaction survey),

Landowners (measure with satisfaction survey), and

Livestock producers (measure with satisfaction survey).

MEANS OBJECTIVE: Economic (minimize regulations/regulation changes on restriction of current export of MT cattle (consultation between Department of Livestock & FWP).

MEANS OBJECTIVE: Logistical (minimize # livestock tested annually as a percent of total population in DSA).

MEANS OBJECTIVE: Cultural (stigma) (minimize difference between market price (\$/head) between comparable cattle originating inside DSA and outside DSA).

FUNDAMENTAL OBJECTIVE: Maximize cost effectiveness.

## <u>Action Alternative – Additional Management of Elk Distribution</u>

(List does not contain all potential actions. Other actions may be identified consistent with the intent to adjust elk distribution.)

### Hunting

- Reduce winter herd size/density
- Develop adaptive hunting regulations
- Develop late season hunts beyond 15 Feb
- FWP use hunt coordinators for management hunts
- Use season structure to address harboring

#### Habitat

- Perform/suggest landscape alterations that will promote spatial and temporal separation of elk and livestock during critical brucellosis risk periods
- Small, scattered manipulation (for example, high intensity/short duration livestock grazing of underused areas) of native vegetation on WMAs and public lands to attract/retain elk
- Plantings
- More rest/rotation grazing
- Water development

#### Containment

- In open (primarily non-timbered) elk winter range, reduce wolf/pack numbers
- More intensive hazing of elk in high risk areas
- Public funding for fencing cattle feeding areas
- Decrease harboring
- Elk-proof fencing for high-risk areas by locale
- Purchase/lease more WMAs for purpose of spatial separation
- Endorse development of collaborative incentives for harborers to allow access

#### Research/education

- Increase monitoring of seropositive elk movements
- Expand ongoing elk distribution research to DSA and contiguous areas
- Educate harborers (neighbor, affected party, FWP/DOL contacts)
- Delist B. abortus so vaccine can be researched
- Expand ongoing seroprevalence research to DSA and contiguous areas

The working group recommends the concept of local working groups to assist FWP in identifying, implementing and evaluating specific management actions. These working groups were not specifically defined and may be new or existing groups, formal or informal, long lasting or temporary. At a minimum, they should reasonably represent the various values and perspectives that include elk and livestock interests.